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ABSTRACT

This is a report on Home Activities for Toddlers and their Families (HATAF), an ongoing Israeli intervention program designed to provide home-based, educationally enriching activities for disadvantaged preschoolers and to enable mothers to participate in enhancing the intellectual development of their children. The report describes two sample pilot projects that were undertaken as part of HATAF's tryout stage. Pilot one consisted of two stages. The first stage provided instruction for 1-year-old children of Asian and African immigrant families. Trained paraprofessional aides periodically visited each family in the sample to deliver and explain pre-planned written materials with appropriate play activities to the mothers. The second stage sought to obtain more information on the mothers, assigned a more active role to the aides, and provided activities that were more adaptable to individual children's developmental levels. Pilot II, which was based on the results of the first pilot, focused more systematically on the mother-child intellectual process and on the manipulation of selected variables to influence intellectual growth. The report describes the objectives, activities, problems, changes, and outcomes of each of the pilot projects, providing a detailed description of how the program was actually implemented and evaluated in the field. (Author/MJL)

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HOME ACTIVITIES for TODDLERS And Their FAMILIES (HATAF)

AN INTERIM REPORT

April, 1976

THE NATIONAL COUNCIL of JEWISH WOMEN
RESEARCH INSTITUTE FOR INNOVATION IN EDUCATION

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PREFACE

A report on a study in progress can be presented in many ways. Rarely do we have the opportunity to share with program designers the thinking, the problems and the observations that they have experienced in the development of their programs. To date, HATAF has completed two short pilots and a more systematic, small sample pilot is in its second year of operation. This interim report will present the planning and events in the development of the HATAF program in chronological order, dealing with each question as it arose and as it was considered at that point in time.

The reader will note that with every added experience, the HATAF team changed its approach to the goals, content and structure of this home based program. This report should allow for retrieval of ideas and help the team and the reader deal with the continuing issues which have arisen and which will be summarized when the study is concluded, data analyzed and the final report is presented.

INTRODUCTION

The Home Activities for Toddlers and their Families (HATAF) program is a natural outgrowth of the Home Instruction Program for Preschool Youngsters (HIPPY). It was demonstrated that Israeli mothers were interested in and capable of participating in a project designed to foster the intellectual growth of their chiddren (Davis and Kugelmass, 1974; Lombard, 1973). In the HIPPY program, mothers, under the guidance of non-professional indigenous aides, administered a highly structured sequential program of activities to their 4 - 6 year old children in the home setting. Data on the target children who participated in the program indicated that they showed an advantage in cognitive tasks as compared with non-instructed controls. Follow-up data on these children indicated that this advantage was maintained on school achievement tests two and three years after the termination of intervention (Lombard, 1973).

Parent participation in preschool programs was neither new nor unique to HIPPY. During the past decade, parent involvement became an important ingredient in program design. This position was based, essentially, upon the theoretical formulations and accumulating empirical data on the influence of home, and especially maternal behaviors, on the cognitive abilities of young children. (Bernstein, 1961; Bloom, 1964; Freeberg and Payne, 1967; Hess and Shipman, 1968; Hunt, 1969). It was felt that parents must be helped to acquire the skills and attitudes that would provide a more enriching and supportive environment at home.

Program models emerged that differentially conceived the role of the parent in relation to the educational system and the child. The roles assigned to parents ranged from one of passive observor in the preschool setting to that of active teacher of the child in the home setting (Gordon, 1969; Hess et al, 1969). However, since the child's cognitive achievements were the major focus of interest in most programs, the role of the parent was often relatively unclear or of secondary importance.

Recent reviews of early childhood education programs indicate

that the conceptualization of the role of the parent in the program may be an important factor in determining program effects. There is no evidence that there is an impact upon the intellectual performance of children whose parents have assumed either staff-type or decision making roles in the school setting (Stearns, et al., 1973). On the other hand, findings suggest that children involved in home based parent participation programs make larger initial gains than their control counterparts, irrespective of the type of program or the age of the child (Beller, 1973; Bronfenbrenner, 1974). However, Bronfenbrenner (1974) concluded that this advantage seems to disappear more quickly in programs when the focus has been primarily on the child and the parent's role has been subordinate to either the preschool teacher or the home educator. Although the number of programs that have given a central role to the parent is rather small and the evidence of durability of effects is still very limited, these reviews suggest that giving the parent an important and independent role in the educative process with his child may have good potential for effecting changes in children's intellectual performance.

HIPPY was amongst the first programs to give central importance to the role of the mother. The premise was that the lower class mother, if properly guided, could become a responsible and successful teacher of her child. In her role as teacher, she could acquire new skills and understandings and, hopefully, a more positive view of herself as an educator. Furthermore, the child has the advantage of on-going individual instruction and the very important experience of interacting with a highly significant person in his life (Lombard, 1973). During the past few years, many new programs have been developed in this direction. The Home Start Program in the U.S. "focuses on enhancing the quality of children's lives by building upon existing family strengths and emphasizing the role of parent as the first and most important influence in the growth and development of their children" (O'Keefe, 1973). A conference was held in the U.S. in 1975 devoted exclusively to the subject of home intervention programs. (O'Keefe, 1975).

Mother-Baby/Toddler Programs:

The largest number of the systematic home-based intervention studies that have assigned a central, active role to the mother have involved mothers and their children under the age of three. (Forrester, 1971; Gordon, 1969; Levenstein, 1970; Lambie, 1974). It is, perhaps, not accidental that mother-baby/toddler programs were pioneers in this direction. Early childhood specialists had been sensitized for several decades by psychiatric and psychological theory and data to the importance of the first years of life and to the central socializing force of the family upon the direction of the social-emotional development of the child. With the awakening of interest in cognitive development in general and the problems of the disadvantaged in particular, attention was refocused upon the family and the role it plays in the cognitive development of the child. The theoretical formulations of Piaget (1952) and Bruner (1964) and a growing body of empirical data (see reviews by Caldwell 1970; Schaeffer 1972; White 1971) presented support for the importance of the early development of cognitive structures and the environmental impact upon the direction of that development. It was not difficult for some early childhood researchers and educators to make the transition from focusing upon the role of parents as social-emotional socializers to the role of parents as cognitive socializers as well.

The need for both early intervention and parent involvement received support and emphasis by investigators who had sponsored some of the first home based programs for children of different ages in which the parent had an unimportant or subordinate role to the intervenor. (Gray, 1970; Painter, 1969; Schaefer, 1970; Weikart, 1969). Their recommendations arose through an analysis of their own data which indicated to them a need for both early intervention and strong, ongoing parent involvement. Two of these researchers did, indeed, become pioneers in parent centered programs for babies

Gray's infant program (Forrester et al., 1971) and Weikart's infant program (Lambie, et al., 1971).

The objectives of almost all of the mother-child home based programs have been twofold: (1) to help the mother acquire new attitudes and skills so that she could become an enriching change-agent in the intellectual development of her child (2) to effect a positive and significant change in the intellectual performance of the target child. All programs have obtained significant changes in the intellectual performance of the child as compared with their control counterparts. Children from two of the programs (Gordon, 1972a, Levenstein, 1971) have maintained their advantage two and three years after the termination of intervention. Several studies have also presented correlational data between post-intervention measures of mother and cognitive gains in children (Gordon, 1972b; Levenstein, 1972; Lambie, 1974; Schaefer, 1969).

Surprisingly little data is available on program effects upon the mothers or on the interactive processes between mother and child. An assumption that would have to be common to parent participation programs in general, and to parent-operated home based programs in particular, is that lower class mothers are flexible and capable of acquiring new skills and attitudes. In most studies a willingness to cooperate, persistence in the program and the subjective reports of parents or intervenors has been offered as evidence of success.

Little data are available on some of the basic questions.

1. Do mothers actually change during intervention and in what ways?
2. What are the dynamics of the interactive process that may lead to a change in the intellectual performance of the child?
3. If the child's performance improves, what factors are operating in the intervention that might have influenced that change?
4. What other changes, if any, take place in children's behavior during the intervention?

Beller (1973), Streissguth and Bee (1972) and Weikart (1974) have called for designs that would include baseline data, for better instrumentation, and for more systematic analysis of the processes when mother-child interactions are manipulated.

THE HOME ACTIVITIES FOR TODDLERS AND THEIR FAMILIES (HATAF) PROGRAM

During the summer of 1972, the decision was taken by Dr. A. Lombard and Professor H. Epstein to develop an intervention program for disadvantaged toddlers and their mothers in Israel. Dr. Lombard's experience with the mothers in the HIPPY program lent support to the assumption that mothers of very young children would be willing to participate in educationally enriching activities for their toddlers. The advantage of an earlier start was of special interest to Professor Epstein, who had hypothesized a clear relationship between the growth of the brain, intelligence, and early stimulation (Epstein, 1976). As conceived at that time, the major objectives of such a program would be: (1) to stimulate and influence the intellectual growth of the young child (2) by helping his mother provide enriching activities for mental growth:

Issues:

The decision to create such a program raised a multitude of questions, many of which were interdependent. They included:

The Program:

1. Should intervention efforts be equally directed at mother and child or should one of them receive primary focus?
2. How does one achieve balance of focus?
3. If mother is the primary target, what are the critical variables to be manipulated?
4. Should program activities be pre-planned or should they grow out of spontaneous activity in the home?
5. What are - and how does one select - "stimulating activities" for toddlers?
6. If program is structured, how can it be adapted to individual needs of mother and child?
7. How does a stimulation program view the "whole child"? To what extent and how should social-emotional growth be integrated?

The Intervenor:

1. How should the intervenor role be defined?
2. To what extent should a program be dependent/independent of intervenor skills?
3. Can professionals and paraprofessionals be equally effective intervenors?
4. What differences in training and supervision are needed for

the different programs under consideration and for different personnel?

The Age of Entry and Duration of Program:

1. Is there an optimal age for entry into program?
2. How long must program operate to achieve effects?

The Population:

1. Are all mother-child dyads who fit defined demographic criteria in need of an intervention program?
2. What criteria, other than demographic criteria, can be used for selection?

Plan of Operation:

The mother-baby programs that were in operation in the U.S. had answered these questions in a variety of ways and presented different models. However, the programs had not been in operation long enough to allow for evaluation of which model was most "successful". Evaluation of program effects is, at best, difficult and problematic. The problems are compounded when one is in search of a model:

1. Progress reports told little about the process of field implementation, of the daily difficulties in maintaining a program, of the idiosyncracies introduced by the variability in children, mothers and staff.

2. One could not assume that models developed in other countries would necessarily be appropriate to the disadvantaged population in Israel. The social-cultural experience of the disadvantaged in Israel was certainly different from their counterparts abroad and one could not be sure which, if any, of the models would be more appropriate.

The HATAF investigators felt that the time was not ripe for the initiation of a systematic study. There seemed to be a need for a trial and error, look and see period. They envisioned several short term, small sample pilots that would give cues and serve as a basis for decision-making.

To date, two short pilots have been completed and a more systematic, small sample pilot is in its second year of operation. It is important to point out that at all stages decisions were influenced by the search for a model that could be applicable to broad-based field implementation: the program had to be administrable and

relatively inexpensive. Theoretical considerations had, therefore, to be adopted to field reality.

From the very early stages of planning, the administrators of the Tipat Chalav (Well-Baby Clinics) services in Jerusalem were enthusiastic about the development of the program and became active partners in its implementation. The Tipat Chalav clinics offered the research team a laboratory for observation of mother-baby dyads, provided listings of potential families, and involved two senior nurses in the program as part of their ongoing in-service training.

This interim report will attempt to share with the reader some of the thinking, the activity, the problems and the observations that the team has experienced over the past three years. Data and conclusions will appear in the final report.

PILOT I: STAGE I (APRIL 1973 - JULY 1973)

Although the theoretical and operative problems facing the program designers were numerous, field operation demands decisions. The first issues to be dealt with were what program - for whom?

Program:

The Home Based Model that was most familiar to the team was the HIPPY program for preschool youngsters. Rather than begin with a total unknown, it seemed reasonable to attempt to adapt this model for the Mother-Toddler program. This required:

Preparation of pre-planned written materials that would suggest appropriate play activities for the mother to engage in with her child during the week.

Selection, training and supervision of paraprofessional aides who would visit each family once a week, deliver and explain the materials to the mother and lend support and advice.

Age of Entry:

While the early infancy period may be very significant in the development of cognitive structures, SES differences between children are observed by about one and a half years. (Bayley, 1965; Golden and Birns, 1971; Schaefer, 1969). The research team felt that intervention should begin several months before this focal age and continue until at least age three, the age by which SES differences are usually well established. The decision was taken, therefore, to introduce children to the program at 12 months of age.

Population:

The children of the Asian and African immigrant families of the 1950s, who comprised the bulk of the disadvantaged school population in the past decades, are now young parents. Most of them have completed eight years of school. However, there is no evidence as yet that these young parents provide their children with the kinds of experiences that seem to be necessary for school success and the development of intelligence. It, therefore, seemed that the wisest long term

investment would be to work with young mothers of first babies from this population. The assumptions were:

1. Young mothers of first born children may be more flexible and more receptive to guidance and instruction.
2. Young mothers could use the new tools, understandings, etc. not only with the target children but with those yet to be born.
3. Selection of only young mothers of first born children would introduce some homogeneity and control in the sample

Families would be selected who fit the following demographic criteria:

1. Families whose first born would be 11-13 months old at the time of initiation of the program.
2. Young, intact families who, at time of intake, do not suffer major physical or social problems.
3. Families in which both parents are of Afro-Asian origin.
4. Families in which both parents have had most of their primary school education in Israel and whose level of education is between 8-10 years.
5. Families in which mother is the major caretaker of her child, is at home, or does not work full time.

This program was based on the assumption that the young mother is motivated to play and interact with her child, is interested in his development and is in need of suggestions and support in order to translate her motivations into meaningful activity and interactions.

It was quite clear that the most important objective of the first pilot was to become acquainted with the young Israeli mother of disadvantaged background. The central questions were: are the mothers, indeed, motivated to interact with their children and how do they respond to an enrichment program?

Intake Procedure:

Potential families for the program were visited, without notice, by two members of the research team. Mothers were told that the visitors were from Tipat Chalav and "were interested in what mothers do with their young babies". No mother refused initial entry.

An unstructured interview in which the mother described a "typical day" that detailed both her activities with the child and her child rearing attitudes was tape-recorded with each mother. A demographic description of the family was obtained and the Denver Developmental Test administered to the baby to screen out children with possible

developmental lag.

At the end of the visit, the mother-baby program was described and the mother's interest was recorded. Mothers were told:

> "We are from the Education department of the Hebrew University. Together with Tipat Chalav we are planning to develop a new program for mothers and their babies. Just as the Gan (a nursery school) is important to help prepare a child for school, we think that what the child learns at home helps prepare him for Gan. The child's most natural and most important teacher is his mother. The little child likes to play and learn while playing. We think that we can help him learn a lot here at home, together with you. We will visit you once a week and bring you suggestions for play activities that you can do with your child. We will watch together how your baby learns through play. This will be the first program of this kind in Israel and is a University research study. Would you be interested in participating in such a program?"

Mothers who expressed interest were told that not everyone would be able to participate and that they would be contacted again.

Sample:

Twenty-six families fitting the demographic criteria were identified in the files of two Tipat Chalav clinics in the Katamon quarter of Jerusalem. The Tipat Chalav nurses reported that five of these mothers had serious problems and were not the principal caretakers of their children. Seven other families could not be located. The remaining fourteen families were visited and interviewed.

Four mothers who expressed interest in the program were not invited to participate because they were upwardly mobile and their level of interaction with their babies appeared quite different from the mean behavior of the other mothers. (Budget restrictions at the time did not allow for carrying too many families and it seemed preferable to eliminate these rather than mothers more in need). Ten mothers were visited a second time and invited to participate. One mother had changed her mind and refused. The other mothers were at home full time and were living in their own or rented apartments, without extended family. All husbands were currently employed. Three families faced econmic or housing problems and five of the mothers were in advanced stages of pregnancy with their second child. Babies ages

ranged between 11-13 months; 5 were boys, 5 were girls.

Materials:

Each week the mother received a play activities kit which was especially designed for this project. The kit contained five or six activity sheets. The prime focus of each activity was directed toward one of four areas: language games, search games, gross motor and eye-hand coordination games. Each week the aide brought one inexpensive book or toy that was necessary for one of the activities and was given to the family. The other activities required no materials or simple materials that were available in the home.

The activity sheets were highly structured and included: a simple explanation of the purpose of the activity, materials necessary, instructions of the steps to follow in play, language to be emphasized, suggestions as to how to simplify the activity if it seems too difficult and how to amplify it if it seems too easy, and space for mother to record her opinion of the activity.

Most of the activities required the active participation of the mother. However, one of the suggestions in each packet was for a "free play" activity. Mother was asked to give her child certain materials (magazines, bells, stacking cups), to observe him on several occasions and record his behavior. It was hoped that this technique would encourage the mother to observe her child at play and help develop observation skills.

Field Operation:

Aide: The Tipat Chalav nurses were consulted and they recommended a local mother of five, with eleven years of schooling, to serve as the field aide for the pilot program. Only one aide was engaged since dividing the number of participating families would have made the job financially undesirable.

After a brief training period, the aide visited each family once a week and participated in a weekly training session at the University. At this meeting she submitted two reports on each mother: one described the mother's general response and behavior during the visit;

the other detailed the mother's reactions to the play activities she had been given the previous week. The latter was filled out together with the mother.

The aide was instructed to describe and explain each play activity carefully to the mother, with special emphasis upon the objectives and the importance of the mother as stimulator of her toddler. The aide was to consider herself an "educator" and to try to restrict her relationship with the mother to friendly chatter and questions of child rearing. She was given leeway to use her own good judgment on child rearing problems raised by the mother but was not to attempt to impose on authoritarian attitude or to criticize. The aide had no particular role to fill in relation to the child, but was, of course, encouraged to establish a friendly relationship with him and to observe the mother-child interaction during the visit.

Each mother was visited approximately six times during May-June, 1973. The aide was generally received pleasantly, but many appointments were broken and she had to return several times in order to deliver the weekly play kit. The field supervisor accompnnied her once to each family.

Group Meetings: The project team felt that group meetings should be an integral part of the program. The focus would be on general questions of child rearing and development while allowing for communication among the mothers. It was expected that these meetings would provide a supportive framework which would serve to reinforce the mothers' home activities.

One group meeting was held. Although most mothers had expressed interest in the group, only one managed to organize herself and appear with her child, in spite of the fact that door to door transportation was provided. Two mothers were persuaded to come by the pick up driver. Attendance, therefore, was only three out of a possible nine mothers.

A non-commercial film illustrating the behavior of a one and a half year old child was shown and the mothers participated actively in the discussion which followed. They all agreed that group

discussion was a good idea and requested more meetings.

Attrition: After the aide's second visit, one mother asked her not to return because she was looking for a flat and could not keep appointments. A second mother dropped out after the fourth visit because she was in her last month of pregnancy and did not feel well. Both of these mothers asked to rejoin if the program should continue in the fall.

Evaluation:

Evaluation of this short pilot was based upon information obtained in the preliminary interview, the aide's reports, and on a follow-up interview with each mother after the termination of home visits.

Preliminary Interview: This sample, small and homogeneous as it was with respect to demographic criteria, evidenced the known variability in human characteristics. There were "good mothers" loving, responsive and motivated to play with and stimulate their child, and "poor mothers" rejecting, avoiding, unstimulating - and those somewhere in between. However, with apologies for generalization, one could say that these young, first generation Israeli mothers appeared to be different from the "stereotype" of their immigrant mothers (on whom there is very little data). They expressed confidence in themselves as child raisers and provided at least a minimum of stimulation: they bought some toys and gave their babies objects to manipulate, they exposed them to experiences in the immediate environment and drew upon the reservoir of their own experience to talk to the baby and teach him simple songs and games. On the other hand, the mother's verbal interaction with her child seemed to be limited and restricted; the toys and activities were simple and stereotyped - objects "to keep the baby busy", with little need for the mother to interact with him.

Aides' Reports: The aides' reports seemed to lend support to this observation. Mothers tended to give the children the program materials to use, especially the "free play" activity materials. Activities that required interaction weren't done, because they were

"familiar", "the baby didn't like it", "I'm too nervous", or "I'm busy". Some activities were tried once, but there was little follow-up that same week and no repetition during the weeks following. Observations of the child at play were not done or were very superficial.

Follow-up Interview: During the follow-up interview, the mothers were open and critical. Most of them indicated:

1. That the activities suggested were nice but were either familiar or too simple; only "didactic" activities such as the "books" or "scribbling" were seen as new and stimulating.
2. That too many activities were given each week - they "didn't have time for so much".
3. That they did not relate seriously to the activity sheets, except for the sections on "purpose". Sections on language, simplifications or expansions were ignored.
4. That the aide's method of delivery was resented; the activity sheets were considered self-explanatory and did not require detailed explanation. Almost all the mothers preferred to receive the material by mail.

In spite of the criticisms, eight of the nine mothers wanted to continue in the poogram. They felt that it was basically a good idea "and could help to develop the baby". Six of the fathers supported their wives and thought that the program was beneficial; two husbands were anxious about why their child was chosen, but did not present obstacles; and one father agreed with his wife that the program "was for parents who don't know what to do with their babies". Relatives and neighbors were also interested and encouraged mothers to participate.

Conclusions

The project team could not come to clear conclusions on the basis of this short field experience and very limited data. However, some insights were obtained that provided the basis for consideration and planning of the next stages of operation.

The fact that the mothers wanted to continue in the program in spite of their criticisms seemed to indicate that they were basically

interested in and concerned about their childrens' development. However, their behavior during the program - inability to keep appointments, limited interaction, lack of initiative were all indicators that they do not translate their aspirations into meaningful, goal-oriented behavior. In addition, the babies were just becoming toddlers and beginning to present greater challenge. Mothers had begun to complain to the aide about problems they were facing - feeding, control, etc. A second child was on the horizon. This constellation of factors seemed to indicate that these young mothers were, indeed, in need of an intervention program.

On the other hand, it was clear that the level of program activities and most especially the method of delivery were inappropriate. Mothers were not getting what they wanted or what they needed. Secondly, the structure of the program provided insufficient feedback on the mother herself, on child characteristics, or on the mother-baby dyad.

The decision was taken to continue working with this initial sample in the fall, but to devote the summer to a review of the relevant literature and to a reconsideration of program implementation.

PILOT I: STAGE II (NOVEMBER, 1973 - MARCH, 1974)

The summer of 1973 was devoted to reviewing the literature on intervention and considering the questions raised during Stage I. Although it was not clear whether the cause of failure of the Stage I program was unsuccessful delivery by an inexperienced paraprofessional, the research team felt that the problems which arose resulted from incorrect assumptions and inappropriate delivery techniques.

Basic changes in program focus, the role of the aide and program activities were recommended for Stage II

Program Focus: The young Israeli mothers in the Stage I sample appeared to be less motivated and less capable of facilitating interaction with their toddlers than had been assumed. In order to plan a more appropriate program further information was needed about these mothers. It was decided to obtain more refined observations on mothers and mother-baby dyads and to define the mother behaviors that needed to be manipulated more carefully.

The team members felt that in order to do this effectively it would be necessary for them to go into the field themselves as field aides. It was hoped that this experience would provide more reliable feedback on the population and better preparation for developing a model and supervising others in the future.

Role of Aide: The role of the aide was changed from one of an inactive instructor to that of an active model. The aide was to engage in the planned play activities with the child and to try to reach the mother indirectly through comments and interpretation. She was to involve the mother in the play session and to slowly transfer the major active role to her. Throughout, she was to observe mother behaviors in general and the interactions between mother-baby dyads in particular.

The aide was to see herself primarily as an educator. In that role she could not ignore general child rearing practices or questions of social-emotional development. However, she was to be careful and respectful of different social-cultural practices that she

met in the homes and was not to criticize or embarrass the mother. The aide could and should attempt to establish a warm, friendly relationship with the mother and other family members, but she was to avoid becoming overly involved in personal and family problems.

Program Activities: The program would continue to be based on a series of pre-planned play activities. Due to the change in role of aide, however, pacing would be more flexible and activities adapted to the developmental level of the individual child. Fewer lessons would be delivered each week and every session would include reviews of previous activities.

"Activity Sheets" would be given to the mothers, but they would be more informal and serve as "reminders" for the mothers of what they had observed during the aide's visit rather than highly structured guides.

Sample:

Stage II was scheduled to begin in October, 1973. The Yom Kippur War necessitated a delay and field operation did not begin until the end of November. The decision had been taken to continue working with all of the Stage I families and to add several others so that the total would be approximately 12. However, the post-war tensions and conditions effected changes in these plans.

The nine mothers who had participated in Stage I were visited and told about the changes in the program. The one mother who felt that she did not need the program had returned to work full time; one mother had moved to a middle-class housing project and avoided contact with the team; two fathers were in the army and their wives and babies were living out of the city. The remaining five mothers were pleased that the program was to continue and agreed to participate.

A second group of mother-toddler dyads fitting the demographic criteria for selection and from the same Tipat Chalav stations were identified and interviewed. Three of the four mothers visited agreed to participate in the program.

The final small sample of eight mother-toddler dyads included

children in two age ranges: the five babies from Stage I were between 15-17 months, and the three new cases were between 13-14 months. Three were boys, five were girls.

Aides:

Three project team members, two M.A. and one B.A. in early childhood education served as aides in place of the paraprofessional. In addition, an experienced Tipat Chalav baby nurse was assigned to the project for two days a week to receive in-service training. She joined the team as an aide and participated in training sessions and discussion.

Materials and Field Operation:

Each aide worked with two families whom she visited once a week for 50-60 minutes. The number of visits ranged between 11-15 during a four month period.

The aide brought to the weekly visit one to three suggestions for new activities. The number depended upon the type of activity and the developmental level of the child. Most of the activities related to one of the following areas: language, eye-hand coordination, gross motor, search games, problem-solving and dramatic play. A balance was attempted between didactic and social activities.

The younger children began with some of the activities that had been prepared for Stage I and were revised for Stage II. The older children were given new games and materials appropriate to their developmental level. As the number of activities accumulated, the repertoire was exploited and most of the hour was devoted to review. On several occasions no new activities were introduced and special attention was given to areas in which the child needed practice or to activities that the mother and child clearly enjoyed.
These reviews demonstrated to the mothers the need for and the pleasure in repeated practice. They also served as an index for the aide of whether the mother had engaged in the activity with the child between home visits.

The aide was very active during her visit - sometimes with

the child, sometimes with the mother. During the first months of the field work, there was much variability in the extent to which mothers were ready to become involved. Sometimes the aide was used as an excellent baby sitting service while mother cooked or cleaned; sometimes mother was present, but very passive and inattentive; sometimes mother was passive but very attentive. Only one mother was immediately alert and active at all sessions. The decision was taken not to require active involvement as a condition for participation in the project during the first stages. Coercion might have had contrary effects. It was hoped that participation would occur as a result of generated motivation. And, indeed, it did. After approximately three months of home visits, all of the mothers had begun to change and, in varying degrees, to participate in activities.

The aides used a variety of techniques to interest, stimulate and activate the mothers:

1. Ongoing verbal description and explanation of what the aide was doing with the child
2. Interpreting the child's responses
3. Asking mothers for ideas of how to expand, simplify or vary an activity.
4. Observing child at solitary play, together with mother.
5. Asking mother to do review activities.
6. Asking mother to try new activities.
7. Positive reinforcement of mother's strengths.

At an appropriate moment during the visit, mothers were given the new "Activity Sheets". These "reminders" were very simple and sections related to: purpose of activity, general instructions and techniques, and responses to expect from different children. From time to time, a series of questions was asked to which the mother was supposed to pay attention during the week as she played with her child. At a follow-up review, the aide asked the mother how she had answered the questions.

One could get the impression that the aide was so preoccupied with the mother that the child became unimportant to her. Quite the contrary, charming and active toddlers invite attention. They also

present challenge. The aides had to become acquainted with and adapt themselves to each individual child. They experienced many satisfying moments, but they also had the short attention span, tantrums, and adult testing of the toddler to contend with. The aides had to be consciously aware of their behavior and utilize a variety of techniques if the visit was to run smoothly and successfully. Great effort had to be exerted to maintain contact with the mother and not to focus entirely upon the child.

Group Meetings: Frequent and regular group meetings were to be an integral part of the program, but the tensions of the war period made this unrealistic. One very successful meeting was held in the morning at the local Tipat Chalav station. In contrast to the group meeting in Stage I, seven of the eight participating mothers and their toddlers attended. The mothers first enjoyed watching the children at play together and then joined the aides for a discussion on "ways I keep my child busy". After the discussion, mothers made a toy horse for their children.

Attrition: Towards the end of the third month of operation, one mother dropped out of the program because of family health problems. Her contention was realistic, but the team felt that she was not really interested and ready to make an effort.

Training and Ongoing Monitoring:

The aides met twice each week for discussion and training. A brief meeting was held at the beginning of the week and was devoted exclusively to the distribution of Activity Sheets and a discussion of delivery techniques. During the first weeks of field work, the objectives of each activity were outlined and each aide implemented them as she saw fit. It soon became clear that interpretations and techniques varied considerably. The advantages and disadvantages of this approach were argued and reargued. The decision was taken to prepare an "Aide's Guide Sheet" to accompany each activity that specified what should be emphasized with mother, special didactic techniques (when necessary), and language and concepts to be

emphasized with the child. The Guide Sheets would allow for some project control over the "input" and would serve, in the future, as training instruments for aides with limited professional skills.

A full morning session at the end of the week focused upon the week's visit to each family. Since the aides worked with only two families, they were able to report in great detail what they had done, share what they had observed and raise questions.

The aides completed a check list after each visit that related to 1) mother's participation and involvement in activities, her teaching techniques, use of language, and reinforcements; 2) child's cooperation, response to Mother, attention span, skill level, etc. While the check list helped provide basic information, the aides felt that the list was limiting and missed interesting detail. Reporting techniques would clearly have to be dealt with in future stages of the project when feedback would not be obtained as easily and observers would be less experienced.

Approximately two months after initiation of the field work, each aide submitted a progress report on her families that covered the following areas:

1. Family's living conditions and interpersonal relations (husband - wife - child - grandparents - friends).
2. Mothers relationship to child: image of child, warmth, control strategies.
3. Mother's behavior during the visits: involvement, ability to interest child, expectations-demands, encouragement-reinforcements, teaching techniques, language, response to aide.
4. Child: curiosity, attention span, level of performance, response to mother, response to aide.

Changes in the status of all of these variables were noted in the weekly evaluation sessions, so that a fairly full picture of the family was obtained.

In addition, each aide observed and recorded the mother-child behaviors in two separate teaching situations. Different recording techniques were used. The observations were used as a basis for discussion rather than for systematic analysis.

Evaluation:

As in Stage I of this pilot study, evaluation was based on interviews with the mothers, aides' reports, and observations of mother-child dyads.

Mothers: The questions asked of the mothers in a semi-structured interview were similar to those asked at the conclusion of Stage I. An attempt was made to explore her evaluation of the program content, the method of delivery, what it gave her and her child, and her husband's and family's relationship to the program. It was clear from the responses that the mothers were positive and enthusiastic, and were very disappointed that the program was to be terminated. While there was variability in content of mothers' responses, the overall evaluations were strikingly similar.

1. Most of the activities were regarded as contributing towards the development of the child. There was still a tendency to prefer what they regarded as "didactic" games and activities that utilize tangible objects.
2. The program was "good for the child". It gave him play activities during the week. Most reported with surprise and pride that he was doing things at an earlier age than they would have expected: use books, do puzzles, color, etc. Several mothers isolated improved attention-span as an important achievement.
3. The program was "good for the mothers" as well. It gave her ideas how to keep the child busy, and ideas of what toys and books to buy. All the mothers said that they played more with the child than they might normally have done.
4. All of the mothers rejected the idea of receiving the activities sheets in the mail in place of a visit by the aide. The aide "makes me participate", "shows me how to do things", "gives me ideas", "encourages me".
5. All the mothers regarded the Activity Sheets as valuable and necessary "reminders". Three mothers said that they were saving them to use with the second child.

6. None of the fathers resisted the program. Five fathers encouraged mothers to participate and read the activity sheets, but were passive; three others became actively involved and tried many of the activities with their child.
7. All of the mothers agreed to pay a small monthly fee toward purchase of materials, if it was requested. Three mothers suggested that we ask for a larger sum.

Aides: The positive and enthusiastic responses of the mothers did not come as a surprise to the project team. They, too, had a rewarding and interesting experience. They felt that, as aides, they had established a good working relationship with each mother and child (with the possible exception of the one mother who had dropped out). In fact, the project was beginning to run so well that much caution had to be exercised in evaluating what had been done. It was clear that this had been a highly individualized program run by trained professionals, a case of what Hunt called "the usual confounding between teacher skills and program effectiveness". (Hunt, 1969, p. 173). However, taking this into account, the team tried to evaluate the experience on the basis of the data obtained as participant-observers. They were well aware that besides being emotionally involved, they had observed a very small sample. The common features within this sample, however, were striking and gave some license for generalization:

1. Living Conditions and Family Relationships: Seven of the eight families were living in their own or rented flats. Only one lived with the extended family and faced a serious housing problem. In five of the families, the child and parents slept in the same room. The relationships between husbands and wives were fairly good; none were, at that time, facing serious conflict or threat of separation. All of the fathers gave the child time and attention - five of them consistently and actively. Four families had a second child, and two mothers were pregnant. The extended family played a major role in the lives of the target children and their parents. Most of the grandparents lived in Jerusalem and mothers and babies spent many

hours with them. In fact, in most cases these visits were the mothers' principal social activity. Four of the mothers complained of isolation: they had no or poor relations with their neighbors and only three couples had friends with whom they socialized.

2. Children: No attempt was made, at this stage, to systematically evaluate children's achievements. All of the children established a warm relationship with the aides. None of them showed signs of serious developmental lag and all seemed to be developing in their use of language, ability to deal with materials, and attention span, all within the expected variability in level and rate. There was no way of ascertaining how much of this change was a result of natural development and how much a product of program stimulation.

Each child had his activity preferences, but the response to the variety of activities was generally good. Most of the activities seemed appropriate to and adaptable to individual children's levels. The "problem of the match" (Hunt, 1969) is much more difficult in operation than it is in theory. Adjusting to the ability, style, tempo and moods of the child was a task in and of itself. The major part of the aide's time and attention was directed toward the child. Three children were particularly difficult, but could be worked with.

3. Mother Participation and Involvement: There were the beginnings of observable changes in six participating mothers (including the dropout). The one mother who lived with the extended family entered the program after the others and no changes occurred, though she was cooperative. The mother who needed the program the least was the most enthusiastic and the most responsive. Mothers were more receptive, more active during the visit, beginning to play more with the child between visits, taking more pride in the children's accomplishments. However, the extent of the changes must not be exaggerated. One might say that the aides were at the point where they might have been able to begin to influence more basic changes.

The road to these achievements was not easy and required thought and patience. Problems that persisted during the intervention period included:

a) High frequency of illness of mother or child, forgetting appointments and presence of visitors interfered with a regular and orderly series of visits.
b) It was difficult to determine whether the mother was attentive to or understood what the aide was doing or saying. Very often the aides felt that they were "talking to the wall". Mothers did not respond to ongoing comments about child behaviors observed during the play sessions and they never asked spontaneous questions.
c) Five of the eight mothers were harassed by personal problems and complained that they did not have time and patience to play with their toddlers.

4. Mother-Child Relationships: The aides had the feeling that only three of the eight mothers were really enjoying their babies and that for these mothers the pleasures of motherhood outweighed the difficulties. They praised their children and were physically and verbally warm with them. The other mothers were not rejecting but were much less child oriented, more distant and tended to discuss their concerns about their children's problems rather than their children's assets.

Mothers did not have appropriate or adequate control techniques with these curious and active toddlers. They tended to shout and threaten a great deal and there was suspicion that two mothers used physical punishment. They seemed to be very inconsistent; they did not organize the home for toddlers, were very permissive - and then responded with anger. In several homes accidents occurred - bottles and scissors left accessible, chairs left near dangerous railings on balconies, etc.

In several families, mother's pleasure in "teasing behavior" was observed. This was not a control technique but was used in play "for fun". They told little lies, played tricks and enjoyed the child's confusion. Two of the mothers who did this consistently were the warmest and most attentive to their children.

5. Mother as Teacher: During the play sessions some common weaknesses and limitations became salient:

a). Mothers had highly unrealistic expectations. They were concerened that the children "had no patience," "couldn't concentrate". Activities that didn't go well at once were either "not interesting for him", "too easy" or "too difficult".

b) Mothers had a limited repertoire of teaching techniques. If the child did not respond quickly, they would give up rather than seek alternate methods. Interaction was often artificial and strained; the spontaneity of play was lacking.
c) Mothers spoke to their toddlers but the language was non-specific and repetitive; they rarely expanded or explained. They seemed to talk at the baby rather than to him.
c) Mothers did not notice or did not value small achievements and were therefore parsimonious in their use of positive reinforcements. On the other hand, they were not negativistic and did not ridicule the child when he failed.

Conclusions: Pilot I, Stage II

The project team felt that this short field experience had given them a view of what to expect of the young Israeli lower class mother and of what the problems might be in implementing a stimulation program. They were able with more but cautious confidence to conclude that:

1. The mothers are concerned about the development of their children but lack the skills and attitudes necessary for positive and facilitating interaction.
2. The mothers are willing to participate in a program that may be of benefit to their child, but must be helped to become active participants in such a program.
3. Home based intervention is a new and unnatural situation for mothers and toddlers. Patience and understanding are necessary if their confidence is to be won.
4. The program can be based on a prepared package of activities. While this type of program is somewhat artificial, it has several important advantages: a) it relieves the the intervenor of the strain and ingenuity required to seek and implement spontaneous activities - especially in homes where toys and materials are restricted; b) it ensures control over content and style of input; c) it offers the mother and child something new and special.
5. The child is a powerful figure in the tryad created by mother-child-aides. Aide skill is required in implementing

the activities with him. However, there is a danger that the mother's role can assume secondary importance because of this.

6. The aide was regarded as the key to the program. In order to train and guide her, much thought must be invested in techniques of in-service training. Special materials should be prepared for this purpose.
7. The interaction between mother and aide required by this model counter-indicates, at this stage, the use of para-professionals with little education or sophistication. The program requires personnel who can more easily and quickly learn basic notions of child development and mother child interaction - and can implement this know-how in their work. A variety of personnel should be involved as aides in the next stage: professionals, students and especially para-professional mothers who had completed 11-12 years of education. Selection criteria should include: flexibility and a child-centered orientation.

PILOT II: (JUNE, 1974 - OCT., 1976)

On the basis of the evaluation of Pilot 1, the team felt that the model created was potentially effective and warranted replication in a second pilot with a more systematic design. Several major issues were anticipated. These included:

1. Elements such as the play activities and intervenor training had only been minimally defined. Further specification was necessary for repeated implementation.
2. The Pilot I Sample had been very small. It was not clear whether the patterns of mother-baby-intervenor interaction that had been observed could be repeated.
3. It was not clear whether mother interest and participation would be sustained over the two years planned, as compared with the four months in Pilot I.

The team had already learned that real people, real budgets, and complicated circumstances of field research require flexibility. The major purpose of Pilot II would be to adapt and develop the basic model that had been introduced in Pilot I into a feasible field program. Research objectives would be defined, but because of the need to clarify questions and to further develop materials and techniques, Pilot II would be another small sample, exploratory study.

Objectives:

The focus of the program would be upon the mother-child interactive process. Special attention would be directed toward the manipulation of both mother and child variables that had been cited in the literature as significant for intellectual growth and had been isolated during Pilot I as weak and in need of support, stimulation or redirection.

Toddler: The program would attempt to stimulate the development of the motivations and skills essential for active intelligence.

The child variables selected for attention were:

1. Motor, perceptual, cognitive and language skills.
2. Attention span

3. Curiosity
4. Play patterns

Mothers: The program would attempt to motivate the mother to interact more frequently with her child in defined play situations.

The program would attempt to help mothers acquire and strengthen skills and attitudes which would facilitate her interactions in play with her child.

The mother variables selected for attention were:

1. To understand the abilities and limitations of each developmental stages: (attention span, skills, role of play, etc.).
2. To acquire a variety of teaching techniques (demonstration, cues, help, pacing, repetition)
3. To acquire improved language skills (labeling, description, explanations)
4. To increase use of positive reinforcements.

It should be noted that the objectives for the mother were quite specific and restricted to behaviors observed in defined play situations. The program model was based upon engagement of mother-toddler dyads in a series of pre-planned activities; it did not address itself to the overall attitudes and practices of the mother.

The literature has indicated that the mothers of competent children do, indeed, play with their children more than other mothers (Clarke-Stewart, 1973; White, 1973). It has also been suggested that another important difference between mothers may be in their ability to exploit everyday situations for learning experiences. White,(1973) has called this "teaching on the fly" - the suggestion, help, extension of child's activities in very brief contacts, often as a response to the child's overtures. The team hypothesized that this kind of behavior is a product of attitudes and skills acquired before the mother reached motherhood. Teaching this behavior to the lower class mothers to be involved in this project, while perhaps not impossible, would be a difficult pedagogical task. It seemed more reasonable to attempt to build some of the attitudes and skills that are prerequisite. Defined play situations seemed like a concrete and manageable means to do this. Mothers would be encouraged both by

the aide and through program activities to see and exploit learning opportunities. While there was no reason to assume that minimal intervention would effect basic patterns of behavior, it was hoped that exploitation of the unplanned learning opportunities that arise in every home might be a possible by-product of the experience in the program.

The same position was taken in relation to the mother's relalationship to her child. The team could not conceive of a program inteded for mother-toddler dyads that could ignore basic emotional motivations and responses. The mother would have to be helped to understand the close relationship between emotional and cognitive behavior. However, the mother's child rearing patterns would not be a primary objective for manipulation.

Program evaluation would include the examination of generalization effects.

Evaluation and Instrumentation:

Evaluation would be based on four phases of data collection: pre-intervention baseline data, ongoing monitoring throughout the intervention period, and assessment at the end of the first and second year of the program.

The basic data on the variables to be manipulated (see above) would be obtained through observation of mother-baby dyads under two conditions:

1. in their homes, in their unstructured, natural environment.
2. in structured play and teaching situations.

At the time this program was being designed, other mother-baby home based programs had reported their program effects primarily in terms of the changes in I.Q. performance of the target children. They did not report changes in other significant child variables. No attempts were made to systematically study the before/after patterns of mother-child interaction. This data was considered essential for evaluation of the HATAF.

During the early months of 1974, while Pilot I was in operation, the team invested many hours in the observation of mother-child dyads and in the selection and design of instruments that might be suitable

for the measurement of major variables to be manipulated in the HATAF program. Many techniques and procedures were considered. Some were reluctantly rejected for budgetary reasons - such as repeated home observations or the use of video-tapes in structured situations.

Middle-class and lower class dyads were observed in the "waiting room situation" and in structured play in three Tipat Chalav stations and in naturalistic observations at homes. Instruments cited in the literature as well as specially designed instruments were tried. It had originally been thought that the baseline data on structured interactions could be collected in Tipat Chalav. However, the setting proved to be unnatural for the dyads and the data were difficult to obtain. A second try-out period was conducted at homes. This was easier and potentially more effective.

Observor Training: The months of observation provided an excellent opportunity to train observors. In addition to the "in-situ" observations, two video tapes of dyads in structured play were filmed. and used to achieve observor reliability.

Additional toddlers between 12-16 months in day-care centers and in homes were located and used as practice subjects in training for the administration of the Denver Developmental Test.

Two types of observor teams were selected. In one, two observors simultaneously gathered data in structured play settings. Three other observors worked independently to gather data for the natural observations and the Denver Test. Several complete practice runs of the intake procedure were conducted in homes of dyads with the same demographic background as those who were to be included in the sample.

Intake Procedure: The data from the structured play and naturalistic observations were collected in two separate intake sessions. The procedure followed and the instruments used included:

Intake I: (Structured Play): A team of two observers visited the homes, without an appointment. They told the mother that they were from Tipat Chalav, that they had some new toys, would like to see how the baby plays with them and to ask her some questions about him.

1. Free Play: Mother was asked to stay in the room, but remain passive, unless baby approached her. Mother seated baby on floor and observer placed 6 toys in a semi-circle around him. Toys were: doll, puppet, rattle, rubber animal, blocks, wagon.

Baby was given 3 minutes for warm-up and then everything he did for the next 5 minutes was recorded by both observers. Mother was not told to participate, but her interactions with the baby were recorded as well.

2. Busy Box: Free play toys were removed and child given a "Busy Box" to explore. Mother was asked to remain passive unless baby approached. Baby's behavior with Box was recorded for 5 minutes. Mother was then asked to join baby "to show him what you can do with the box" and behaviors recorded.

3. Books Mother was asked about baby's experience with books and other reading materials, whether she thinks babies this age are interested, and how hers would react to a book that we brought. She was then given a baby book and asked to show it to her child "in any way that you want". All of mother's verbalizations were tape-recorded. A technique of simultaneous recording was developed for mother and child actions. One observer recorded key words in verbalizations of mother plus her actions; the other observer focused upon baby behaviors and key actions of mother.

Arrows indicated where an episode originated. The combinations of these two protocols plus the tape recording gave a pretty full picture of the interactions between dyads. Recording was continuous for a maximum of five minutes or until baby lost interest.

4. Box and Pins: The last task presented was a structured teaching task for mother and baby. Mother was shown a small, wooden box with a flip lid; in the lid was a small round hole and in the box 5 colored clothes-pins. She was asked whether she thought her baby could learn to do four steps: open box,

remove pins, close box, insert pins through hole. She was then asked to try to teach her baby to do all four steps. The same recording procedure was followed as with the book - tape recording of verbalizations and simultaneous observor recording of actions. Observation time was maximum of five minutes or until baby lost interest. At the end of the observation mother was asked whether she was surprised by baby's responses and to evaluate his success on the task.

Interview: When these four tasks had been completed, mother was asked to join observors "to tell us some things about baby". Meanwhile, baby played with his own toys, project toys or was put to bed, as the situation demanded. One observor conducted a semi-structured interview and the other recorded mother's responses. A full tape recording of the interview was obtained as well. Questions focused primarily upon:

1. Mother's attitude toward toys and play.
2. Image of child
3. Control techniques
4. Experience index of child in/out of home
5. Expectations and aspirations of parents
6. Father participation

The interview lasted approximately 45 minutes.

When the interview was completed, mother was told about the new program for mothers and toddlers. The explanation was the ame as that given in Pilot I (see page 11). Mother was asked whether she would be interested in participating and/or was willing to allow us to come back from time to time to observe her child. Interest in the program was regarded as a criterion for inclusion in the sample, whether as an experimental or control family, in order to control for motivational factors. A second appointment was made for another home observation with all those who were interested in participating.

Intake II: (Naturalistic Observation) The naturalistic observation took place within one week of the first Intake. Appointments were scheduled for morning hours when the child was fed and rested and should have been alert and ready to play. One observor only was present and she knew nothing about the

mother and baby behaviors observed during Intake I.
Mother was told to go about her regular routine and to try to disregard the observor. After a brief warm-up, observor recorded all mother and child behaviors including verbalizations, space shifts, objects offered or manipulated, etc.
Recording was continuous for fifteen minutes and time noted at five minute intervals. This procedure was repeated four times with an observor break of five minutes between recording periods. Full protocols, therefore, include 60 minutes of recording gathered over 75 minutes.
At the end of the observation, the observor administered the Denver Developmental Scale.

Design:

The project was designed to include three sub-samples - one experimental treatment and two controls. Data from a study by Levenstein (1973) indicated that when just the program toys were delivered to a contrast group, the children showed significant I.Q. gains over controls. The decision was, therefore, taken to submit half of the controls to a variation of the home visiting program.
Experimental (E): Weekly home visits by aide who would play with baby and serve as a model and guide for mother.
Pre-Post Testing; Ongoing Monitoring
Contrast (C_1): Bi-weekly home visits by the same aide working with E families. Aide would not play with child or serve as model. Mother would be given same activity sheets, toys and explanations as E mothers.
Pre-Post Testing; Ongoing Monitoring
Control (C_2): No home visits.
Pre-Post Testing

A total N of 36 was anticipated: 16 E families, $8C_1$ families and $8C_2$ families.

This design was implemented during the first months of program operation, but due to budgetary complications had to be discontinued. A simpler single treatment (E) and non-treated control (C) design

was adopted and is currently in operation. (More detailed explanations will appear in section on Field Operation)

Sample:

Selection: Family selection was based upon the same demographic criteria that were used in Pilot I (see page 10). The one change in criteria was a slight shift upwards in the age of entry of the target child. Mothers observed in Pilot I seemed to operate with confidence until their children were age one and they were initially attracted by activities that appeared "clever". It therefore seemed preferable to introduce babies to the program at approximately 14 months of age and capitalize upon their growing competence as a motivational factor for the mothers.

Experience had shown that the number of families fitting the demographic criteria who were available for or interested in the program was relatively small. In order to increase sample size, families were drawn from Tipat Chalav stations in Katamon as well as from a second neighborhood, Shmuel Hanavi. Individual, isolated families were not selected because the community concept was important. It was hoped that the mothers would eventually come to group meetings and get to know each other.

A second, practical means of increasing sample size was to phase families into the program in separate waves. Three intake periods were planned - one in Spring, 1974, early fall 1974, and late winter of 1974. All of the children would, therefore, have been born during the same year. At each intake, families were to be assigned to each of the different treatments.

Because of budgetary complications, the second intake period was postponed and for reasons beyond control, became the last wave. The first wave (A) took place during April 1974, and the second wave (B) in November-December 1974.

Wave A: Thirty-one families fitting the demographic criteria were identified in two Tipat Chalav stations in Katamon. Seventeen of these were eliminated before the intake process was initiated: 9 had moved, 2 had serious health problems, 5 mothers worked full time, one was an immigrant. The remaining 14 were processed and all were

interested and invited to participate. Nine of the babies were boys, 5 were girls.

Wave B: Thirty-five families were identified in Katamon and again more than half were lost before intake: 9 had moved, 6 had health or social problems, 2 were working and 3 were immigrants. Fourteen dyads were processed. Three mothers were not interested in the program. The remaining 12 were invited to participate. Five babie were boys, 7 were girls.

Twenty families were identified in Shmuel Hanavi. Thirteen could not be located, 1 had serious social problems and 6 mothers were working. Only 6 families were processed and all were interested in the program. Three babies were boys, 3 were girls.

In contrast with the procedure followed in selection in Pilot I, mothers who fit the demographic criteria but seemed to be functioning above the group mean were not eliminated from the sample. There had been a hint during Pilot I that the better functioning mothers were the most responsive to the program. It was felt that it would be important to observe these mothers' reactions and to monitor their functioning as their babies grew older and presented greater challenge.

The total sample for this project was therefore 32 mother-toddler dyads.

The 32 families who comprised this sample presented an interesting picture of the young and struggling first generation Afro-Asian families living in two of Jerusalem's depressed neighborhoods. Because of selection criteria, these families did not appear to represent the most severely deprived or disturbed element in the community.

Eighteen families owned their own flats, 7 were in rented flats, and 7 were living with the extended family. The number of rooms ranged between 1-3; the majority lived in two rooms. Twenty-seven of the babies were sleeping in the room with their parents, even though in most cases separate sleeping quarters could have been arranged. All the babies had their own cot and most had a carriage, but other baby equipment was sparse. The limited quantity and poor

quality of toys and objects available to the babies was startling. Three babies had nothing; most had two or three infant toys such as rubber animals, rattles, a ball; about half the babies also had a stacking tower and/or a book or musical instrument.

When they entered the program, 4 mothers had just given birth to a second child and 6 mothers were pregnant. All of the mothers were at home full time with their babies. Most mothers were in their early twenties, fathers in their late twenties. Thirty fathers were working regularly; 24 of them were unskilled and worked as drivers or in the building trades; only 6 were skilled workers or worked in government offices. All of the fathers had served in the army and one was disabled and unable to work.

Assignment to Treatments:

The variability amongst the mothers along several critical dimensions was obvious. Because the sample was so small, random assignment to treatments could have resulted in a very biased distribution. A matched groups design was therefore selected. Two observers independently rated the mothers as "functioning well" "average' or "functioning po rly". Such factors as number and kinds of toys available to child, living conditions and mother's attitudes and behavior during first intake session were taken into consideration. In spite of the subjective nature of the ratings, there was strong rater agreement. The mothers from each group were then randomly assigned to treatments. This procedure was followed for both Wave A and Wave B. Seven mothers were rated high, eighteen as average and seven as low.

Materials (Play Activities)

The play activities were to serve primarily as a medium for stimulating interaction between mother and child. The idea of preplanned activities was based upon the assumptions of the "deficit theory", i.e. - that not enough spontaneous, enriching experiences were occurring in the home. The pre-planned activities were to be a substitute. The team believed that almost any activity, if developmentally appropriate, could be enriching for the child and serve

as a tool to stimulate mother's understandings, skills and interactions. Activities should be varied and, especially in the early stages, not overly didactic.

However, the program writers agreed that the dyads should not be presented with a random, "potpourrie" of activities. Since much effort was to be invested in writing a two year program, it seemed wise and necessary to define criteria for selection of activities.

Following a close review of the activities offered in other programs and different theories of child development, the decision was made to adopt an eclectic approach to the selection of activities rather than base the program upon a particular theory. No one model relates to or explains all aspects of the child's intellectual development. The core of the program was therefore based on both Piagetian and language models.

The play activities were classified into categories, but it was clear that few, if any, activities for young children develop only one skill or capacity. There is much overlap and many activities are multi-purpose.

The first year activities for toddlers (14-24 months) would focus on:

Sensory-Motor Activities:	Search games Perceptual-Motor Gross Motor and Body Image
Language Activities:	Books Songs and movement Dramtic play

The second year program for toddlers (24-36 months) would focus on:

Purposive Exploratory Activities:	Sorting of objects and pictures Perceptual-Motor Transformation of State
Language Activities:	Books Story Sequences Dramatic Play

Selection of categories was only the beginning. Then came the job of choosing specific activities, thinking them through and writing. It must be remembered that each activity for this program included planning: an actual activity for mother and child, an activity guide sheet for the mother and a guide sheet for the aide. These three elements are interdependent and had to be conceived together. It is difficult to report the deliberations that this required. Perhaps only readers who have attempted program writing will fully appreciate the difficulties.

In order to be included, an activity had to be considered:

1. fun
2. to require no materials/household materials/inexpensive toy or book
3. appropriate to a small household
4. relevant to development of the selected child variables.
5. to offer possibility of direct or indirect mother participation.

Some of the activities were adapted from other programs; many represent the collected experience of staff members with their children. The developmental requirements of the toddler stage necessitated activities that utilized toys or objects. The writers tried to build activities on household items as much as possible. Approximately 50% of the activities required commercial toys. It was important for the budget and most especially for the mothers that these toys be inexpensive. The high cost and poor quality of simple toys available in Israel was a limiting factor. Much thought was invested in selection of these commercial items. They were not regarded as a necessary evil - they are, after all, the items that are found in middle class homes and are used as "educational toys" by the middle class child. Each time a new toy or book was brought to the home, the aide explained why it was chosen and pointed out to the mother that inexpensive materials are stimulating for the child, often more appropriate than the expensive ones.

The activities used during the first months of field operation had been pre-tested during Pilot I. The others were written as the program progressed. Approximately 55 activities were prepared and tried during the first year; 30 were prepared and are currently

being tested for the second year. The activities in each sub-category were organized:

1. by order of difficulty
2. with a recognizable continuity from activity to activity.

It was anticipated that this would:

1. Allow toddler practice of specific skills, with increasing difficulty.
2. Allow mother to observe child's gradual progress.
3. Allow mother to see the common elements in activities that appear different.

The guide sheets for the mother and aides made reference to the grading and continuity. The sheets for the mother were basically similar to those used in Pilot I. Each page included: simple explanations of the value of the activity for child, simple instructions, suggestions for expansion, and an illustration of child or mother and child engaged in the activity. From time to time, a series of questions relating to mother's observations was asked. Flyers on "Counting", "Books," "Use of Discards", "Sounds in and outside of Home", "Mother's Helper", were also distributed.

Field Aides

Role of the Aide: The aide was regarded as the mediator of the program. While failure to achieve project objectives could be a result of many factors, success could not be achieved without satisfactory program delivery.

The main roles of the aide were:

1. to create a positive atmosphere so that play and learning through play - would be both stimulating and fun for both mother and child.
2. to serve as a teacher for the child
3. to serve as a model and guide for the mother.
4. to serve as an observer and reporter of the events and interactions that take place during home visits.

The role of observer-reporter was important and necessary within this pilot for several reasons:

1. to provide feedback to the staff so that they could monitor
   a. suitability of activities for children
   b. ongoing responses of mothers and children

2. as feedback to staff so that they could provide appropriate ongoing supervision

Training Objectives: The project team felt that the aides could not be expected to successfully fulfill their roles without training and supervision. In addition to her field roles as teacher-model, observer-reporter, the team viewed the aides in another role within the project - as student-learners. Training objectives were directed towards:

1. Helping the aides acquire a theoretically based view of child development and mother-child interaction.
2. Helping the aides acquire an understanding of program activities and their objectives.
3. Helping the aides acquire techniques for working with children and deliveryng activities so that she could motivate the child and serve as a good teacher for him.
4. Helping the aides acquire techniques for activating the mothers, for translating program messages and serving as a good model for her.
5. Helping the aides acquire techniques for observing and reporting ongoing mother-child behaviors.

Training Materials: In order to help achieve these objectives, special materials were prepared. These included:

1. Short articles that served as a basis for group discussion that related to
   a. theoretical topics such as: the one and two year old, individual differences, language developemnt, reinforcement, teaching techniques, etc.
   b. specific areas of instruction such as: eye-hand coordiantion, use of books, dramatic play, motor activities, etc.

   The articles were introduced gradually at an appropriate moment during in-service training.
2. An Aide's Guide Sheet that accompanied each play activity and focused upon the theoretical and specific objectives of activites and suggested techniques for working with child and activating the mother. The guide sheet format was not standard and was adapted to the requirements dictated by the specific activity. These guides were distributed at the weekly training session and were dis cussed in detail.
3. A weekly report was completed by the aides on each of the families. In addition to general information, she was required to detail: what activities were engaged in, who

initiated each one, mother's involvement, and child's attention span and progress. The aides reported on each of their families at every training session.

4. Monthly check lists and reports in which a more general picture of the family was described: mother's affective relationship to child, relationship between parents, relationship between siblings, etc.
5. Observation check lists for aides to complete after they had observed and recorded in detail mother-child interaction in a defined activity. These checklists were to help direct the aides' attention towards specific mother behaviors: mother's enthusiasm, teaching techniques, language, reinforcements.

The level of these materials was directed toward the untrained paraprofessional. They had to be simple, not overly detailed and yet provide information. An effort was made not to turn the aide into a clerk with a lot of paperwork. The materials have seen several revisions and final formats are currently in prepartion.

Aide Selection: During the first year of operation of Pilot II, six aides of varying professional background were involved:

1 B.A. (Staff member) Early childhood
1 B.A. (Staff member) Education
1 Tipat Chalav nurse
1 Student - Early Education
2 Paraprofessional mothers

During the second year, there was complete aide changeover. The first year program aides left and all the families were assigned to two new paraprofessional aides.

The role of the aide is not a simple one. In addition to the specific roles that she is required to fulfill within the program, she must learn to enter into a variety of home atmospheres, relate to different personalities and to different mother-child relationships. Home intervention is new for the mothers, too. They are not accustomed to a stranger entering their homes on a regular basis. The aide can be a threat or an annoyance to her. Each aide comes to the project with her own conceptions and misconceptions of what families are like or should be. If an aide is to be successful in her role, she would have to be alert and flexible; she would have to

learn the delicate balance between basic acceptance and constructive guidance.

The paraprofessional aides who have been involved in this project were located through the recommendation of the nursery school teachers in the Rassco quarter of Jerusalem and the Tipat Chalav nurses in Kata on. The requirements for the role were described to the teachers and nurses and they were asked to select "successful mothers" who were not working and who might be interested. A team member visited these mothers in their homes and made a pre-selection based on the mother's behavior with her own children and the apparent child centeredness of the home. Candidates were invited to an interview with three team members and chosen on the basis of apparent flexibility, child rearing attitudes and apparent common sense.

Four aides were selected by this procedure. Two were of Eastern origin, two of Western origin and all had 11-12 years of education. They were all upwardly mobile, but came from backgrounds and experiences that should have given them some understanding of the target population. One mother proved to be highly adaptable, grasped and implemented program goals. Two of the aides were warm and accepting, but were slightly over child-oriented and one was authoritarian and left the project after several weeks.

Aide Training and Supervision:

In December 1973 and again in November 1974, a short, pre-service training period was held for the incoming paraprofessional aides. The sessions included:

1. Three days of orientation and discussion of purpose, teaching techniques, mother-aide relationships, etc.
2. Two days of observation of home sessions with an experienced aide.

The pre-training was intentionally brief because the team felt that actual field experience was necessary before an aide could grasp issues involved in field work.

Each new aide was accompanied by the field supervisor to two or three of her first home visits and again several times during the

year.

During the period of field operation, the program writers, field supervisors and aides met (and are meeting) regularly each week. The first half of each meeting was devoted to a review of the weeks' visits; the second half to preparation for the coming week.

These discussions were regarded as the primary training experience. The content of the discussion was generally not pre-planned but was determined by the spontaneous events that had occurred in the field. It was felt that this method was more dynamic and topics were more relevant to the aides. There was much probing and lively interchange and a very wide range of subjects was discussed. A fuller description of the content and method of these sessions will appear in the final report.

FIELD IMPLEMENTATION

Pilot II was initiated at the end of May, 1974. The two staff team members who were serving as aides visited the 4E (Home-visit, teacher + model treatment) and 4C, (Home-visit, materials + explanations only treatment) families. The program ran for six weeks, stopped for a six week summer recess and began again in September.

The second intake wave was scheduled for the early fall. As the project budget was again in question it became clear that the intake would have to be cancelled since the continued operation of the project was not guaranteed. When the budget came through the project was several months behind schedule. The feasibility of the design had to be reconsidered. It was important that the chronological age of the target toddlers fall within the same school year, for both administrative and research purposes. Since the number of new families that could be processed and who fit the demographic criteria would not have been sufficient to fill the design quotas, the decision was made to drop the C_1 treatment and to assign new families to the Home Visit (E) and Control (C) treatments only. The more complex design originally planned was a luxury that the project could not afford.

The question arose as to what should be done with the four C_1 dyads who had been involved in the project for three months. For purely methodological reasons it might have been best to drop them. However, the team felt that it could transfer these dyads to the E treatment without damaging the effects of the study: they had been visited by the same aides as were working with the E dyads, they had received the same materials and explanations, and the program was not yet in full swing.

During November-December, 1974, the eight E dyads of Wave A continued to receive weekly visits. At the same time Wave B was processed and new field aides were screened and trained. The eleven new E dyads began to receive home visits by the new aides in January, 1975. Six of the Wave A families were gradually transferred to these aides, as well, so as to allow the team members to withdraw from intensive field work. Each aide, therefore, was working with dyads from both waves. The two team member aides continued with one family each in order to maintain contact with the field and to provide reliable feedback.

A second unfortunate break in the continuity of the field implementation occurred at the end of June, 1975, again for budgetary reasons. The entire staff was laid off and all activities terminated for almost four months. At that time, the Wave A families had completed a full year in the program and the Wave B families had had six months.

The project reorganized in October. In the meantime the paraprofessional aides had found other positions and were not available. The Tipat Chalav nurse, however, was given an extension of her period of in-service training and rejoined the program. Two new paraprofessional aides were located and trained, using the same selection and training procedures as before.

Visits to the families were resumed in November, 1975. The Tipat Chalav nurse was assigned two families who were new to her and the rest of the E families were divided between the aides. The team aides did not continue in the field. It was felt that the time

had arrived to see how the project would run if implemented only by non-team staff. In addition, it was necessary to assign a larger load to the aides in order to make the job financially meaningful to them.

At the time of this writing (March, 1976), the Wave A dyads have completed one and a half years of the program while the Wave B dyads have had one year. The number of home visits for both groups during the year ranged between 20-30, with an average of 25.

Group meetings: No group meetings were held during the first year of field implementation. When the project was resumed in the fall of 1975, group meetings were initiated. Four meetings have been held to date. Attendance was good for the first three, but low for the fourth. It is too early to know whether this a chance factor or the beginning of a loss of interest.

Attrition: Four E dyads have been lost since the inception of the project, one from Wave A and three from Wave B. A mother from Wave A returned to work full time several months after entering the program. An attempt was made to continue working with the dyad, but the hour proved to be inappropriate for the child.

After six months in the program one Wave B mother left her husband, returned to work and placed her child in a daycare center. One Wave B child was killed in an accident, A third mother left the project by mutual consent at the end of the first year, since she persisted in missing appointments.

As far as is known, none of the C families have moved and none of the mothers have gone to work full time.

The sample at this time, therefore, is composed of 15 E dyads (8 boys, 7 girls) nad 13 C dyads (7 boys, 6 girls).

EVALUATION:

Evaluation measures were gathered at the end of year one for all dyads, using the evaluation techniques and procedures described for the Intake of Pilot II. A final report on the evaluation of this project will be made following its completion in November, 1976.

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